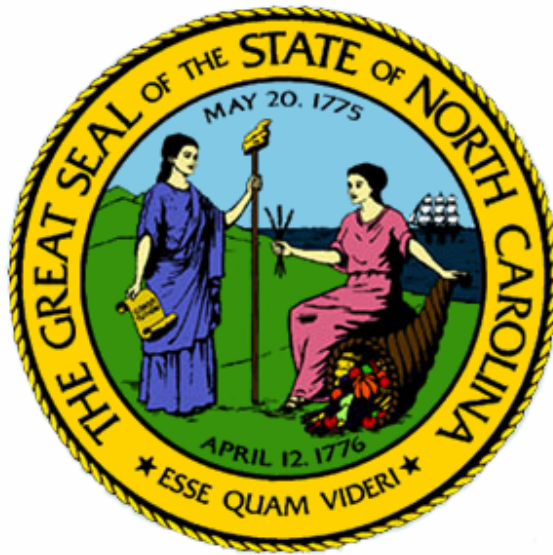


Medicaid Provider Rate Increase Study

Report to the Joint Legislative Commission on Governmental Operations



State of North Carolina
Department of Health and Human Services
Division of Medical Assistance

January 4, 2007

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Medicaid Provider Rate Increase Study

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Background

The State of North Carolina, Department of Health and Human Services, Division of Medical Assistance (DMA) has engaged Navigant Consulting, Inc. and Clifton Gunderson LLP to complete a Medicaid provider rate increase study.

The study and this draft report is pursuant to a North Carolina Senate Bill which requires the Secretary of the Department of Health and Human Services to study and develop an equitable standard for providing inflationary and other cost-related increases to service providers in the Medicaid program. The legislation appropriates \$12 million in general funds for provider payment increases for the 2006-2007 fiscal year. The Department plans to apply these increases effective January 1, 2007, for the remaining six months of the fiscal year. The DMA estimates that to fully fund inflation updates to Medicaid provider payments as specified in the Medicaid State Plan requires \$106.7 million annually in State dollars. Thus, the \$12 million appropriation, on an annualized basis, represents less than one quarter of that amount.

Among other tasks, the legislation instructs the Department to seek the assistance of external consultants to validate the methodologies used to develop the rate increases. The Department engaged Navigant Consulting to provide technical assistance in designing the rate increase study and reviewing the analysis performed by a second contractor, Clifton Gunderson.

This report presents the results of the analysis of Medicaid provider cost increases, and recommended priorities for distribution of additional payments to Medicaid providers.

Study Methodology

Because of the amount of time allotted for completing this study, Clifton Gunderson and Navigant Consulting did not believe that collecting cost data from each of the provider categories would be feasible. Therefore, Clifton Gunderson and Navigant Consulting jointly determined that we would rely on generally accepted and publicly available research sources to understand the change in costs experienced by North Carolina providers.

Identification of Provider Categories

Clifton Gunderson first selected 43 discrete categories of providers for evaluation based on Medicaid paid claims data for State fiscal years 2004 through 2006. To better understand each provider category, Clifton Gunderson and Navigant Consulting gathered the following descriptive information, which is summarized in Table 1:

1. **Number of Medicaid providers** — We compiled the number of providers enrolled in the Medicaid Program from DMA's Annual Report for State fiscal year (SFY) 2005.

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2. **Medicaid Expenditures by Provider Category** — We determined the average annual Medicaid expenditures for each provider category for SFYs 2004 through 2006.
3. **Category Expenditures as a Percent of Total DMA Medicaid Expenditures** — We summed the DMA Medicaid expenditures for the 43 provider categories and calculated each category's portion of the total expenditures.

Table 1: Numbers of Providers and Expenditures by Provider Category

| Provider Category | Number of Enrolled Medicaid Providers SFY 2005¹ | Medicaid Expenditures (3-yr Average SFY 2004-2006) | Category Expenditures as a Percent of Total DMA Medicaid Expenditures (3-yr Average SFY 2004-2006) |
|--|---|---|---|
| Adult Care Home Personal Care Services | 2,086 | \$146,849,919 | 1.99 |
| Ambulance | 273 | 20,410,729 | 0.28 |
| Ambulatory Surgery Centers | 218 | 7,150,768 | 0.10 |
| Birthing Centers | | 77,127 | 0.00 |
| Dialysis Centers | | 24,588,435 | 0.33 |
| Chiropractors | 1,064 | 2,288,499 | 0.03 |
| Community Alternatives Program (CAP) | 1,237 | 537,333,253 | 7.27 |
| Community-based Providers — HMO/Capitated | 1 | 58,935,817 | 0.80 |
| Community-based Providers — Independent Professional Practitioners (IPP) Expansion and Enhanced Mental Health Services | 4,465 | 52,536,130 | 0.71 |
| Certified Registered Nurse Anesthetists (CRNAs) | 2,141 | 6,411,175 | 0.09 |
| Nurse Midwives / Nurse Practitioners | | 694,832 | 0.01 |

¹ Medicaid in North Carolina, Annual Report State Fiscal Year 2005. Unduplicated count of active providers. Physicians may be counted individually and/or as a group.

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Table 1: Numbers of Providers and Expenditures by Provider Category (Continued)

| Provider Category | Number of Enrolled Medicaid Providers SFY 2005 | Medicaid Expenditures (3-yr Average SFY 2004-2006) | Category Expenditures as a Percent of Total DMA Medicaid Expenditures (3-yr Average SFY 2004-2006) |
|--|---|---|---|
| Dentists | 4,234 | \$157,575,945 | 2.13 |
| Oral Surgeons | | 12,835,096 | 0.17 |
| Orthodontists | | 5,768,314 | 0.08 |
| Pedodontists | | 7,696,942 | 0.10 |
| Periodontists | | 18,320 | 0.00 |
| Durable Medical Equipment (DME) including Orthotic and Prosthetic Device Suppliers | 2,200 | 71,346,187 | .97 |
| Federally Qualified Health Centers (FQHCs) | 344 | 24,008,364 | 0.32 |
| Rural Health Clinics | | 16,076,212 | 0.22 |
| Health Department Clinical Services | 497 | 94,930,655 | 1.29 |
| Hearing Aid Suppliers | 92 | 690,912 | 0.01 |
| Home Health Agencies | 414 | 64,095,134 | 0.87 |
| Home Infusion Therapy | | 6,465,321 | 0.09 |
| Private Duty Nursing | | 45,122,394 | 0.61 |
| Hospice Agencies | 78 | 43,082,741 | 0.58 |

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Table 1: Numbers of Providers and Expenditures by Provider Category (Continued)

| Provider Category | Number of Enrolled Medicaid Providers SFY 2005 | Medicaid Expenditures (3-yr Average SFY 2004-2006) | Category Expenditures as a Percent of Total DMA Medicaid Expenditures (3-yr Average SFY 2004-2006) |
|--|--|--|--|
| Hospitals – Inpatient | 556 | \$1,194,200,000 (includes 180,786,000 in supplemental payments) | 16.17 |
| Hospitals – Outpatient | | 597,570,000 (includes 56,144,000 in supplemental payments) | 8.09 |
| Independent Laboratories | 160 | 34,767,580 | 0.47 |
| Nursing Facilities | 1,231 | 1,032,362,803 | 13.97 |
| Intermediate Care Facilities for the Mentally Retarded (ICF/MR) | | 414,808,975 | 5.61 |
| Occupational Therapists | 2,258 | 566,588 | 0.01 |
| Physical Therapists | | 973,557 | 0.01 |
| Respiratory Therapists | | 914,874 | 0.01 |
| Speech/Language Pathologists /Audiologists | | 8,370,341 | 0.11 |
| Optical Service Suppliers | 1,194 | 4,146,582 | 0.06 |
| Optometrists | | 16,019,462 | 0.22 |
| Personal Care Services | 822 | 272,381,725 | 3.69 |
| Pharmacists — Dispensing Fee | 2,012 | 1,491,104,691 ² | 20.18 |
| Physicians | 25,547 | 774,518,361 | 10.48 |
| Podiatrists | 373 | 3,968,605 | 0.05 |

² This amount includes prescription drugs in addition to the dispensing fee paid to pharmacists. The DMA could not separate expenditures for the dispensing fee.

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Table 1: Numbers of Providers and Expenditures by Provider Category (Continued)

| Provider Category | Number of Enrolled Medicaid Providers SFY 2005 | Medicaid Expenditures (3-yr Average SFY 2004-2006) | Category Expenditures as a Percent of Total DMA Medicaid Expenditures (3-yr Average SFY 2004-2006) |
|--|--|--|--|
| Portable X-Ray Service Providers | 28 | \$562,698 | 0.01 |
| Psychiatric Residential Treatment Facilities (PRTFs) | 683 | 14,535,950 | 0.20 |
| Residential Mental Health Treatment | | 118,757,035 | 1.61 |
| TOTAL | 54,208 | \$7,387,519,048 | 100.00 |

In evaluating information about categories of providers, we determined that DMA uses the same fee schedules for multiple procedure code categories, and many categories of providers bill using the same procedure codes. For example, DMA pays all dentists — including oral surgeons, orthodontists, periodontists and pedodontists — using the 066 fee schedule and these providers use many of the same procedure codes in billing for their services. In addition, DMA pays some professionals using the same fee schedule (001) as physicians, for example, chiropractors, podiatrists, optometrists and certified nurse anesthetists. For other professionals, such as therapists, DMA uses different fee schedules, but the fee amounts are a percentage of the physician fee schedule. Table 2 below summarizes the fee schedules used for each of the above categories of providers.

Table 2: Initial List of Provider Categories and Fee Schedules

| Provider Categories | Fee Schedule |
|---|--------------|
| Adult Care Home Personal Care Services | 059 |
| Ambulance | 059 |
| Ambulatory Surgery Centers | 068 |
| Birthing Centers | 068 |
| Chiropractors | 001 |
| Community Alternatives Program (CAP) | 94, 104 |
| Community-based Providers — HMO/Capitated | N/A |

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Table 2: Initial List of Provider Categories and Fee Schedules (Continued)

| Provider Categories | Fee Schedule |
|--|--|
| Community-based Providers — Independent Professional Practitioners (IPP) Expansion | 108, 109, 110, 111, 112, 113, 114, 115, 128, 129, 140 |
| Certified Registered Nurse Anesthetist (CRNAs) | 001 |
| Dentists | 066 |
| Dialysis Centers | 087 |
| Durable Medical Equipment, including Orthotic and Prosthetic Devices | 087 |
| Federally Qualified Health Care Centers (FQHCs) | N/A ³ |
| Health Department Clinical Services | 060 |
| Hearing Aid Suppliers | 102 |
| Home Health Agencies | 087 |
| Home Infusion Therapy | 087 |
| Hospice Agencies | 039, 040, 041, 042, 044, 045, 046, 047, 053, 105, 106, 107 |
| Hospitals — Inpatient | N/A |
| Hospitals — Outpatient | N/A |
| Intermediate Care Facilities for the Mentally Retarded (ICF/MR) | N/A |
| Independent Laboratories | 69, 001 |
| Nurse Midwives / Nurse Practitioners | 063 |
| Nursing Facilities | N/A |
| Occupational Therapists | 071 |
| Optical Service Suppliers | N/A |
| Optometrists | 001 |
| Oral Surgeons | 066 |

³ Provider bills for services not considered as core services using CPT and HCPCS codes and DMA pays these using Fee Schedule 010.

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Table 2: Initial List of Provider Categories and Fee Schedules (Continued)

| Provider Categories | Fee Schedule |
|---|---------------------|
| Orthodontist | 066 |
| Pedodontists | 066 |
| Periodontists | 066 |
| Personal Care Services | 087 |
| Pharmacists — Dispensing Fee | N/A |
| Physical Therapists | 065 |
| Physicians | 001 |
| Podiatrists | 001 |
| Portable X-Ray | 093 |
| Private Duty Nursing | 056 |
| Psychiatric Residential Treatment Facilities (PRTFs) | N/A |
| Residential Mental Health Treatment (Therapy Services Only) | N/A |
| Respiratory Therapists | 058 |
| Rural Health Clinics | N/A ⁴ |
| Speech/Language Pathologists/Audiologists | 064 |

Given the age of the information system that DMA’s current fiscal agent is using, it would be extremely difficult for DMA to consider different payment increases for those provider categories that bill using the same procedure codes for the same fee schedule. In addition, although DMA uses separate fee schedules to pay many different professionals, the Medicaid State Plan specifies that these professionals’ payment are equal to, or some percentage of, the physician fee schedule amounts. Thus, to consider different payment increases for these professionals would require State Plan Amendments for each professional category, in addition to requiring significant information technology changes. As such, we recommended that DMA combine some categories of provider types before considering the rates of inflation and the recommendations to increase payments. Therefore, we combined all professionals paid on the same fee schedule, or linked to the same fee schedule, into broader categories for physicians

⁴ Provider bills for services not considered as core services using CPT and HCPCS codes and DMA pays these using fee schedule 010.

and other professional services, dentists, ambulatory surgery centers and home health. These new groupings resulted in 26 total provider categories that we considered for further analysis⁵.

Estimates of Cost Inflation

In this section, we describe Clifton and Gunderson's and Navigant Consulting's approach to estimating the rates of cost increase for the provider categories.

Data Sources

We recognized that there is not one single source that provides information about cost increases for all North Carolina providers. Therefore, we compiled widely used and accepted measures of inflation and cost data generally used to evaluate health care providers' cost increases. We relied on the following sources:

- Bureau of Labor Statistics Quarterly Census of Employment and Wages — This provides a measure of the average weekly wages paid to employees, reported by industry and sector, e.g., offices of physicians. The Quarterly Census of Employment and Wages reports data nationally and for each state.
- Bureau of Labor Statistics Consumer Price Index — This is a grouping of measures, collectively called an index, of the everyday costs facing consumers in the marketplace. The Consumer Price Index reports data nationally and for each state. The consumer price index reports on eight major categories of fixed products and goods, called a market basket, to track how prices change over time. The change in the market basket price over time is an indication of inflation, or the average change in price.
- Bureau of Labor Statistics Producer Price Index — This is an index of the wholesale product prices facing domestic producers of goods and service, reported nationally. Among other reports, the Producer Price Index reports prices by industry sector, for example, hospitals, nursing care facilities, etc.
- Centers for Medicare and Medicaid Services (CMS) Input Price Indexes — CMS has several indexes it uses to measure inflation for various provider categories for the Medicare Program and to evaluate annual payment changes for providers. We used data from two of the CMS indexes — the Hospital Input Price Index and the Medicare Economic Index for physicians — to calculate the increase in specific cost components and for the portions that specific cost components comprise of total costs.

⁵ The community-based provider — enhanced mental health services is a 27th provider category that DMA identified, but because these services and payment rates were newly established for SFY 2006, we determined that the study of cost inflation prior to 2006 was not relevant for this provider category.

A complete list of source data is provided in Appendix A.

In addition, for one provider category, ICF-MR, Clifton Gunderson reviewed cost report data provided by DMA to determine the two-year change in wages. We then applied a wage weight, as described in the Methodology section below, to this value to calculate the weighted wage change for this provider category.

Clifton Gunderson contacted industry representatives, as listed in Appendix B, to solicit comment and review. We also relied on “Consultants’ best judgment” where necessary to estimate North Carolina Medicaid provider cost increases. For more information about industry representatives, see the Provider Industry Input section of this document.

Method

In this section, we describe the method by which Clifton and Gunderson and Navigant Consulting estimated the rates of cost increase for the provider categories.

1. **Collected inflation index data and data cost components** — We used the Producer Price Index for provider categories for which there is an index for the corresponding industry and we judged the index to be reflective of the provider categories’ cost structure and cost trends. For other provider categories, we collected data to develop an index comprised of three components of costs: wages and benefits, medical/professional liability insurance for some provider categories and all other costs. While there are finer breakdowns of costs within each component, we determined that using the more aggregated components would be the most feasible to achieve consistency across all the categories of providers.

During the past several years, medical/professional liability insurance has been an issue of much interest in discussions about rising health care costs. As such, we included medical/professional liability insurance as a separate cost component in the inflation analysis for selected provider categories, although the portion of total costs that medical/professional liability insurance comprises is relatively low.

Table 3 below summarizes the Producer Price Indexes we used for five provider categories because we determined them to be reflective of the particular provider categories’ cost structure and cost trends. We determined this by comparing the rates of increase in these indexes to the rates of increase using the input price indexes that CMS uses for the Medicare Program and rates of increase in individual cost components.

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Table 3: Producer Price Indexes

| Producer Price Index | Provider Category | Two-Year Cost Inflation |
|--|---|-------------------------|
| General Medical and Surgical Hospitals | Hospitals — Inpatient services | 8.9% |
| | Hospitals — Outpatient services | |
| Nursing Care Facilities | Nursing Facilities | 8.0% |
| Medical Labs | Independent Laboratories | 6.3% |
| Home Care Services | Home Health Agencies , Home Infusion Therapy and Personal Care Services | 3.5% |

Table 4 summarizes the source of data for the cost components we used in developing our own price indexes for the other 21 provider categories.

Table 4: Cost Component Inflation Data

| Cost Component | Source | Description |
|--|---|--|
| Wages and Benefits | United States Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages | <p>These indexes are specific to North Carolina. We calculated the change in the reported indexes between 2003 and 2005. For provider categories with no corresponding industry data, we used data from an industry that was a reasonable proxy for the Medicaid provider category (e.g., the Bureau of Labor Statistics' Outpatient Care Center - local government owner served as a proxy for the Health Department Clinical Services provider category)</p> <p>For a listing of the wage index sources used for each provider category, see Appendix A.</p> |
| Medical/Professional Liability Insurance | <p>CMS Medicare Economic Index</p> <p>CMS Hospital Inpatient Prospective Payment System Input Price Index</p> | <p>We calculated the rate of increase between 2003 and 2005 in the professional liability insurance components of these indexes. We used the rate of increase in the Medicare Economic Index for all the provider categories for which we included this cost component, except for ambulatory surgery and birthing centers, for which we used the rate of increase in the Hospital Input Price Index.</p> |

Table 4: Cost Component Inflation Data (Continued)

| Cost Component | Source | Description |
|-----------------|--|--|
| All Other Costs | United States Department of Labor, Bureau of Labor Statistics Consumer Price Index (CPI) | We calculated the rate of increase between 2003 and 2005 in the CPI — All Items less Food Index for most of the provider categories. We used this index as a broad measure of the input costs that providers face, for example, it includes housing/facility costs such as rent and owners' equivalent rent, housing insurance and utilities. For a few provider categories we used a particular CPI item that corresponded to the provider category, for example, for ambulance we used the CPI — Private Transportation item and calculated the rate of increase in that item between 2003 and 2005. |

- 2. Collected cost component data weights** — We determined the percent of total costs attributable to each of the three components. These are referred to as the component “weights.”

Table 5 presents the methodology used to determine the weights assigned to each of the cost components.

Table 5: Cost Component Weights

| Cost Component | Source | Description |
|--------------------|-----------------------------|--|
| Wages and Benefits | CMS Medicare Economic Index | We used the weight in the Medicare Economic Index for all salary and benefit-related categories. |

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Table 5: Cost Component Weights (Continued)

| Cost Component | Source | Description |
|---|---|---|
| <p>Medical/Professional Liability Insurance</p> <p>Used for the following Categories of Providers:</p> <ul style="list-style-type: none"> • Physicians and other professionals • Health Department Clinical Services • Federally Qualified Health Centers • Rural Health Clinics • Dialysis Centers • Pharmacists • Dentists • Ambulatory Surgery Centers and Birthing Centers • ICF-MRs • Psychiatric Residential Treatment Facilities • Mental Health Residential Treatment Centers • Community-based Providers | <p>CMS Medicare Economic Index</p> <p>CMS Hospital Inpatient Prospective Payment System Input Price Index</p> | <p>We used the weight (3.87 percent) for professional liability insurance from the Medicare Economic Index for many of the provider categories that provide mainly professional services. For institutional and residential services, we used the weight (1.59 percent) for professional liability insurance from the Hospital Input Price Index. For ambulatory surgery and birthing centers, we used an average of these two indexes weights and for pharmacists we used a weight of one percent.</p> |
| All Other Costs | Not Applicable | <p>We calculated the weight for all other costs by subtracting from one the percentage weights for the wages and benefits component and the medical/professional liability insurance component.</p> |

3. **Calculated weighted rate of cost change for each cost component** — We multiplied the rate of the cost change for each cost component by the cost component's weight to determine a weighted rate of cost change for each cost component.

4. **Calculated weighted rate of cost change** — We summed the weighted rate of cost change for each cost component to yield the overall rate of inflation.

Table 6 summarizes the results of these calculations.

Provider Industry Input

For each provider category, Clifton Gunderson sought input on the preliminary cost increase calculations from associated industry groups. Appendix A lists the contacts that Clifton Gunderson used for the provider categories. To solicit and receive provider input regarding the preliminary cost increase calculations, Clifton Gunderson:

- Prepared preliminary cost increase calculations.
- Sent the preliminary information on the cost increase calculation to each industry contact. This information showed the rate of increase and weight for each of the cost components, as well as the overall cost inflation factor.
- Responded to requests for additional information or inquiries. Some industry contacts submitted inquiries via e-mail or telephone, whereas others submitted written comments in memo format. Clifton Gunderson responded to all these requests with a fax of supporting documentation and a telephone call. At the request of the representatives, Clifton Gunderson held face-to-face meetings, conference calls, and lengthy telephone conversations with provider contacts and other industry stakeholders to discuss provider comments.

In some circumstances, Clifton Gunderson used the information provided by the industry contacts to adjust a calculation. Based on information submitted by Michael Jenks at the North Carolina Orthotic and Prosthetic Trade Association, Clifton Gunderson adjusted the weight for the wages and benefits cost category for the Durable Medical Equipment, including Orthotics and Prosthetics provider category.

While not all input from provider associations resulted in adjustments to the calculated inflation factors, the interaction Clifton Gunderson had with industry representatives provided an opportunity to discuss and validate the data. For example, two separate industry contacts asked Clifton Gunderson for more information regarding the wage cost increase data and Clifton Gunderson's decision to use the statewide North Carolina Bureau of Labor Statistics data to measure wage increases. Dr. Ronald Venzie, on behalf of the North Carolina Dental Society, inquired about the dentist provider category data and presented different data based on national trends. Jim Edgerton, on behalf of the Association for Home and Hospice Care of North Carolina (AHHHC), inquired about the community-based provider category data and presented additional data based on regional trends. Clifton Gunderson held separate meetings with both groups to review the suggested data and discuss the merits of using the statewide

data from the Bureau of Labor Statistics, as opposed to national or regional data. In this example, the groups agreed with Clifton Gunderson's decision to use statewide data.

In gathering additional information on the provider category payment methodology and in finalizing the inflation factor calculations, we made some adjustments to the sources of cost data. In doing so, many of the final inflation factors changed from the preliminary calculation results that the provider association representatives reviewed. Most of these changes were small, but for a couple of the provider categories, the changes were larger. In these instances, we contacted the industry representatives, as appropriate, to explain these adjustments.

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Table 6: Cost Inflation Calculations Ordered by Percent Cost Inflation⁶

| Provider Category | Wages and Benefits | | | Professional Liability Insurance | | | All Other Costs | | | Two-Year Overall Cost Inflation |
|---|------------------------|-------------------------|------------------------|----------------------------------|-------------------------|------------------------|------------------------|-------------------------|------------------------|---------------------------------|
| | <i>Two-Year Change</i> | <i>Component Weight</i> | <i>Weighted Change</i> | <i>Two-Year Change</i> | <i>Component Weight</i> | <i>Weighted Change</i> | <i>Two-Year Change</i> | <i>Component Weight</i> | <i>Weighted Change</i> | |
| Rural Health Clinics | 13.29% | 0.7112 | 9.45% | 16.38% | 0.0387 | 0.63% | 6.12% | 0.2502 | 1.53% | 11.6% |
| Federally Qualified Health Centers (FQHCs) | 13.29% | 0.7112 | 9.45% | 16.38% | 0.0387 | 0.63% | 6.12% | 0.2502 | 1.53% | 11.6% |
| Health Department Clinical Services | 13.29% | 0.7112 | 9.45% | 16.38% | 0.0387 | 0.63% | 6.12% | 0.2502 | 1.53% | 11.6% |
| Pharmacists—Dispensing Fee | 13.09% | 0.7112 | 9.31% | 16.38% | 0.0100 | 0.16% | 6.12% | 0.2788 | 1.71% | 11.2% |
| Psychiatric Residential Treatment Facilities (PRTFs) | 13.89% | 0.6000 | 8.33% | 16.38% | 0.0159 | 0.26% | 6.12% | 0.3841 | 2.35% | 10.9% |
| Residential Mental Health Treatment ⁷ | 9.63% | 0.8200 | 7.90% | 16.38% | 0.0387 | 0.63% | 6.12% | 0.1414 | 0.86% | 9.4% |
| Dialysis Centers | 9.76% | 0.7100 | 6.93% | 16.38% | 0.0387 | 0.63% | 6.12% | 0.2514 | 1.54% | 9.1% |
| Intermediate Care Facilities for the Mentally Retarded (ICF/MR) | 9.63% | 0.6500 | 6.26% | 16.38% | 0.0159 | 0.26% | 6.12% | 0.3341 | 2.04% | 8.6% |
| Dentists | 8.09% | 0.7112 | 5.75% | 16.38% | 0.0387 | 0.63% | 6.12% | 0.2502 | 1.53% | 7.9% |
| Physicians and Other Professional Services | 7.56% | 0.7112 | 5.38% | 16.38% | 0.0387 | 0.63% | 6.12% | 0.2502 | 1.53% | 7.5% |

⁶ See Table 3: Producer Price Indexes for the five provider categories (Inpatient Hospital, Outpatient Hospital, Nursing Facilities, Independent Labs, and Home Health Agencies, Home Infusion Therapy and Personal Care Services) for which we used the Producer Price Index instead of developing our own cost indexes.

⁷ Residential Mental Health Treatment includes therapy services only; Medicaid does not cover room and board services in this setting.

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Table 6: Cost Inflation Calculations Ordered by Percent Cost Inflation (Continued)

| Provider Category | Wages and Benefits | | | Professional Liability Insurance | | | All Other Costs | | | Two-Year Overall Cost Inflation |
|--|--------------------|------------------|-----------------|----------------------------------|------------------|-----------------|-----------------|------------------|-----------------|---------------------------------|
| | Two-Year Change | Component Weight | Weighted Change | Two-Year Change | Component Weight | Weighted Change | Two-Year Change | Component Weight | Weighted Change | |
| Ambulatory Surgery Centers and Birthing Centers | 6.42% | 0.6000 | 3.85% | 25.60% | 0.0273 | 0.70% | 6.12% | 0.3727 | 2.28% | 6.8% |
| Ambulance | 5.21% | 0.8000 | 4.17% | — | — | 0.00% | 12.78% | 0.2000 | 2.56% | 6.7% |
| Community-based Providers — Independent Professional Practitioners (IPP) Expansion | 6.51% | 0.8200 | 5.34% | 16.38% | 0.0100 | 0.16% | 6.12% | 0.1700 | 1.04% | 6.5% |
| Community-based Providers — HMO/Capitated | 6.51% | 0.8200 | 5.34% | 16.38% | 0.0100 | 0.16% | 6.12% | 0.1700 | 1.04% | 6.5% |
| Optical Service Suppliers | 8.84% | 0.2000 | 1.77% | — | — | 0.00% | 5.64% | 0.8000 | 4.52% | 6.3% |
| Community Alternatives Program (CAP) | 5.26% | 0.8200 | 4.31% | — | — | 0.00% | 6.12% | 0.1800 | 1.10% | 5.4% |
| Private Duty Nursing | 2.84% | 0.8460 | 2.40% | — | — | 0.00% | 6.12% | 0.1540 | 0.94% | 3.3% |
| Hospice Agencies | 2.84% | 0.8460 | 2.40% | — | — | 0.00% | 6.12% | 0.1540 | 0.94% | 3.3% |
| Adult Care Home Personal Care Services | 2.84% | 0.8460 | 2.40% | — | — | 0.00% | 6.12% | 0.1540 | 0.94% | 3.3% |

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Table 6: Cost Inflation Calculations Ordered by Percent Cost Inflation (Continued)

| Provider Category | Wages and Benefits | | | Professional Liability Insurance | | | All Other Costs | | | Two-Year Overall Cost Inflation |
|--|------------------------|-------------------------|------------------------|----------------------------------|-------------------------|------------------------|------------------------|-------------------------|------------------------|---------------------------------|
| | <i>Two-Year Change</i> | <i>Component Weight</i> | <i>Weighted Change</i> | <i>Two-Year Change</i> | <i>Component Weight</i> | <i>Weighted Change</i> | <i>Two-Year Change</i> | <i>Component Weight</i> | <i>Weighted Change</i> | |
| Durable Medical Equipment, Including Orthotic and Prosthetic Devices | 4.19% | 0.3600 | 1.51% | — | — | 0.00% | 1.40% | 0.6400 | 0.90% | 2.4% |
| Hearing Aid Suppliers | 6.22% | 0.2000 | 1.24% | — | — | 0.00% | 1.40% | 0.8000 | 1.12% | 2.4% |

Other Factors to Consider

The estimated rate of cost increases for provider categories is only one factor in determining an equitable standard for providing inflationary and other cost-related increases to Medicaid providers. Payment methodology and recent payment increase experience are some of the other factors that are important. As noted earlier, we started with the list of 43 provider categories and gathered information from the DMA about how it pays each of them. We used this information to further group the providers into 26 categories. We were also interested in gathering the following information to support the payment rate increase analysis.

1. **Description of the current payment methodology.** For each of the 43 provider categories, we documented information gathered from DMA about the Medicaid Program's current methodology for determining payment. The payment methodology is an important consideration because there are variations across provider categories and some methodologies automatically result in payment increases if providers' costs increase, while others do not without application of inflationary update factors. In the case of inpatient hospital services, for example, there are two payment methodologies, a per discharge or per day rate methodology for services paid through claims processing plus lump sum supplemental payments that are based on hospitals' allowable Medicaid costs. There are also two mechanisms for paying for outpatient hospital services, although the cost methodology for services paid through claims processing and for the lump sum supplemental payments are more similar to each other than is the case for inpatient services. For many other provider categories, there are no such supplemental payments.
2. **Recent payment increase experience.** In discussions with DMA staff, information in the State's Medicaid State Plan and research of Medicare Program payment rate increases — for provider categories' whose payment is based on Medicare rates — we gathered information on payment rate changes over the past few years. In some cases, it was not possible with readily available information to determine the overall rate of payment change for a particular provider category. For example, for dental services, DMA could report the increase in fees that was applied to selected procedure codes on the fee schedule, but analysis of total payments between years, with adjustments for changes in volume of services would be necessary to determine the overall rate of payment change dentists experienced.
3. **Estimates of Medicaid's share of the provider categories' payer mix.** The greater the proportion Medicaid comprises of a provider category's total payment, the greater the influence the Medicaid payment methodology has on providers' spending. We acknowledge that some providers' spending is constrained by the fee schedule or cost-based reimbursement with limits that the Medicaid Program uses to pay them, i.e., they can spend no more than they are paid. Thus, cost increases may be lower for those categories of providers than for providers who are paid by more "generous" methods

and this is magnified if Medicaid is the predominant payer for the provider category. Clifton Gunderson contacted provider industry representatives to obtain estimates of Medicaid's share of total revenues for each provider category.

4. **Federal regulations that limit reimbursement or that might have an impact on considerations of payment increases to categories of providers.** Federal Regulations limit Medicaid provider payments for all categories of providers. For some provider categories, DMA's payment may be closer to the "upper limits" of payment than for other provider categories. For example, for independent laboratory services, Medicaid cannot pay more than the Medicare Independent Laboratory Fee Schedule to independent labs, and this should be considered in evaluating the potential for rate increases to that provider category (42CFR 447.304). In our study, we have identified where we believe upper payment limit considerations may be an issue.
5. **Other "reimbursement considerations."** We also identified other issues we believed to be relevant in consideration of payment increases. For example, hospitals receive Medicaid disproportionate share hospital (DSH) payments from DMA to compensate them for caring for uninsured patients, although one kind of DSH and DSH-like payment augments the Medicaid inpatient per case and per diem rates.

These other factors are presented for each provider category in Table 7.

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Table 7: Provider Payment Methodology Issues

| Provider Categories | Current Payment Methodology | Recent Increases | “Typical” Provider’s Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|--|---|---|--|---|--|
| Adult Care Home Personal Care Services | ACH fee schedule. | No increases in FY 2004, 2005 and 2006. | 25 to 75 percent | DMA, in cooperation with industry providers, is currently reviewing the payment methodology for these services. This review may result in revisions to the methodology. In 2005, increased number of units of covered services from 1 to 1.1 per hour, thereby increasing total payments. | |
| Ambulance | Fee schedule — Payments to providers have historically been set based on cost data. | No increases in FY 2004, 2006. In FY 2005, mileage rate increased for an overall increase of 3 percent. | < 25 percent | | |
| Ambulatory Surgery Centers | 95 percent of Medicare ASC rates. | No increases in FY 2004, 2005 and 2006. | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |

⁸ As reported by provider associations contacted for this study; for a few provider categories, DMA and Navigant Consulting disagreed with the information reported by the provider association representative, so for these categories, Medicaid’s share of the provider category’s total revenue is based on DMA’s and Navigant Consulting’s judgment.

State of North Carolina, Division of Medical Assistance
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Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|--------------------------------------|---|---|--|------------------------------------|--|
| Birthing Centers | 95 percent of Medicare Ambulatory Surgical Center rates. | No increases in FY 2004, 2005 and 2006. | 25 to 75 percent | | CFR 447.325 — Customary charges in locality for comparable services. |
| Chiropractors | 95 percent of Medicare Physician fee schedule. | <p>Medicare fee schedule aggregate changes:</p> <ul style="list-style-type: none"> • 2004 — - 4.5 percent • 2005 — 1.5 percent • 2006 — - 4.4 percent <p>On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007.</p> | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |
| Community Alternatives Program (CAP) | 094 and 104 Fee Schedule + Pricing Action Code (PAC) 7 codes on CAP AIDS, CAP DA, CAP Choice, CAP Children. | No. | > 75 percent | | |

State of North Carolina, Division of Medical Assistance
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Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | “Typical” Provider’s Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|--|--|---|--|------------------------------------|--|
| Community-based Providers — Independent Professional Practitioners (IPP) Expansion | Fee schedule applicable to each service and provider category. | No. | > 75 percent | | CFR 447.325 — Customary charges in locality for comparable services. |
| Community-based Providers — HMO/Capitated | Capitated (Piedmont), actuarially determined rates. | This is a new program and the capitation rates were set recently. | > 75 percent | | |

State of North Carolina, Division of Medical Assistance
Medicaid Provider Rate Increase Study

Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|---|--|---|--|------------------------------------|--|
| Certified Registered Nurse Anesthetists (CRNAs) | 90 percent of Anesthesiology codes on Medicare Physician fee schedule and 100 percent of Durable Medical Equipment fee schedule. | <p>Medicare fee schedule aggregate changes:</p> <ul style="list-style-type: none"> • 2004 — - 4.5 percent • 2005 — 1.5 percent • 2006 — - 4.4 percent <p>On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007.</p> | < 25 percent | | |
| Dentists | Dental fee schedule. | <p>In April 2003, rates were increased 39 percent for certain procedures, including comprehensive exams, radiographic x-rays, restorations and extractions.⁹</p> <p>Effective October 2005, DMA made additional changes to the Dental fee schedule, which resulted in improved payment.</p> | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |

⁹ Mofidi, M. "Background Paper for Recommendation Section 1: Increasing Dentist Participation in the Medicaid Program," North Carolina Oral Health Summit, (No Date), page 1. Available online: http://www.communityhealth.dhhs.state.nc.us/dental/images/summit/Background_Mofidi.pdf.

State of North Carolina, Division of Medical Assistance
Medicaid Provider Rate Increase Study

Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|--|---|---|--|------------------------------------|--|
| Dialysis Centers | Medicare fee schedule in effect 12/31/06. | Paid based on the Medicare methodology in effect prior to January 2005. After that date, Medicare changed to acuity-based method that DMA did not adopt; DMA has no provision for annual inflation increases. | < 25 percent | | |
| Durable Medical Equipment (DME), including Orthotic and Prosthetic Devices | DME fee schedule. | No across-the-board increases in FY 2004, 2005 and 2006. | 25 to 75 percent | | |

State of North Carolina, Division of Medical Assistance
Medicaid Provider Rate Increase Study

Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|------------------------------------|--|--|--|--|--|
| Federally Qualified Health Centers | Prospective rate for core services, increased by Medical Economic Index each year. Services billed separately using CPT codes are paid at 95 percent of Medicare Physician fee schedule or at 100 percent of Home Health fee schedule, depending on the CPT code billed. | <p>FQHCs are paid on a prospective per visit basis for core services, established based on reasonable costs incurred in a specific base year and increased each fiscal year by the percentage increase in the Medicare Economic Index for primary care services and adjusted to take into account any increase (decrease) in the scope of services furnished during that fiscal year. These prospective rates are not subject to cost settlement.</p> <p>Some services billed outside the core rate are paid based on Medicare fee schedule, and rates are updated accordingly.</p> <p>FQHCs that so chose are reimbursed on a cost basis and this payment must be at least equal to the prospective per visit payment the provider would have received.</p> | > 75 percent | Selected FQHCs, e.g. migrant health centers, health care centers for the homeless are reimbursed at 100 percent of reasonable costs. | |

State of North Carolina, Division of Medical Assistance
Medicaid Provider Rate Increase Study

Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|-------------------------------------|---|--|--|---|--|
| Health Department Clinical Services | Cost-settled. | Because of cost settlement, payment reflects cost increases. | > 75 percent | | CFR 447.321 — Outpatient hospital and clinic service; reasonable estimate of amount that would be paid based on Medicare payment principles. |
| Hearing Aid Suppliers | Reasonable costs for fitting and dispensing; hearing aids paid at invoice cost. | Since dispensing fee is paid based on reasonable costs, payment reflects cost increases. | < 25 percent | Hearing aids paid for based on invoice cost, so payment for the hearing aid reflects cost increases. Dispensing fee paid based on reasonable costs, providers can report increased costs as cost increases occur. | |
| Home Health Agencies | Fee schedule with annual increase each year based on forecast of Gross National Product when funding available. | No increases in 2005 and 2006; increase in FY 2004. | > 75 percent | Legislature appropriated \$1.5 million in General Revenue funds for rate increase for home health agencies and community-based personal care services. In 2005, DMA increased payment for selected ostomy supply codes. | |

State of North Carolina, Division of Medical Assistance
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Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|------------------------|---|--|--|---|---|
| Home Infusion Therapy | 100 percent of Medicare fee schedule. | No increases in FY 2005 and 2006; increase in FY 2004. | 25 to 75 percent | | |
| Hospice Agencies | Medicare fee schedule; 95 percent of nursing facility rate for room and board. | Medicare rate increases: <ul style="list-style-type: none"> • FFY 2005 — 3.3 percent • FFY 2006 — 3.7 percent • FFY 2007 — 3.4 percent | < 25 percent | | Medicaid is required to pay Medicare rates for State Plan hospice services. |
| Hospitals — Inpatient | Diagnosis Related Group (DRG), per diem rate; plus additional supplemental payments for a portion of the difference between DRG and per diem payments and costs. State-owned and critical access hospitals (CAHs) and Pitt County Memorial are paid at 100 percent of cost. | For rate year 2005, DRG and per diem rates increased by 3.4 percent. Because supplemental payments are a percentage of the Medicaid deficits, as hospitals' cost increase, their total payments increase even when there are no DRG and per diem rate increases. | < 25 percent | Hospitals also receive \$85,064,000 (3-year average) in Disproportionate Share (DSH) and DSH-like payments, i.e., teaching hospital supplemental and rate adjustment enhanced to compensate them for caring for uninsured patients. | CFR — 447.272. |
| Hospitals — Outpatient | 80 percent of cost plus supplemental payments for a portion of remaining 20 percent. State-owned hospitals, CAHs and Pitt County Memorial are paid at 100 percent of allowable cost. | Because payment is 80 percent of allowable costs, as hospitals' cost increase, their payment increases. | < 25 percent | A portion of the \$85 million in DSH and DSH-like payments noted in the inpatient section above is to compensate hospitals' for providing outpatient services to uninsured patients. | CFR 447.321. |

State of North Carolina, Division of Medical Assistance
Medicaid Provider Rate Increase Study

Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|---|---|---|--|---|---|
| Intermediate Care Facilities for the Mentally Retarded (ICF/MR) | State-owned facilities are cost settled; other facilities' direct care costs are settled but their indirect costs are paid at a set rate that is updated for inflation when funding is available. | Since direct care costs are cost settled, payment increases with increases in direct care costs. DMA increased the indirect cost payment rate by 1 percent in July 2004. There has been no increase in the indirect care cost rate since. | > 75 percent | Provider tax implemented in 2004; any payment rate changes should be considered in terms of impact on the provider tax. | CFR 447.272. |
| Independent Laboratories | 100 percent Medicare Independent Lab schedule; 95 percent of the Medicare fee schedule if Physicians services. | Medicare clinical lab payment rates are frozen for FY 2004 through FY 2008. | < 25 percent | | Medicaid is limited to 100 percent of the Medicare Fee schedule by federal law. The national Medicare limit is 115 percent of the median of all the fee schedules established for a test for each laboratory setting (Section 2303 of the Deficit Reduction Act of 1984). |

State of North Carolina, Division of Medical Assistance
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Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | “Typical” Provider’s Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|--------------------------------------|--|---|--|------------------------------------|---|
| Nurse Midwives / Nurse Practitioners | 95 percent of Medicare Physician fee schedule. | <p>Medicare fee schedule aggregate changes:</p> <ul style="list-style-type: none"> • 2004 — - 4.5 percent • 2005 — 1.5 percent • 2006 — - 4.4 percent <p>On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007.</p> | < 25 percent | | CFR 447.325- Customary charges in locality for comparable services. |

State of North Carolina, Division of Medical Assistance
Medicaid Provider Rate Increase Study

Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|---------------------|--|--|--|--|--|
| Nursing Facilities | Case-mix index adjusted per diem rate (based on patient acuity), adjusted quarterly. | Yes, due to provider tax-related payments. | > 75 percent | <p>Provider tax implemented in 2004; any payment rate changes should be considered in terms of their impact on the provider tax. Provider tax supports the case-mix based reimbursement system; if providers are below the median cost, they are paid an efficiency incentive; currently that is 60 percent of the variance between actual and the median cost; providers above threshold were phased in to the system. Providers have been paid, based on eligibility, incentive periods for two periods.</p> <p>The Legislature appropriated \$1.5 million in general funds for rebasing nursing facilities rates.</p> | CFR 447.272. |

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Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|---------------------------|--|---|--|--|--|
| Occupational Therapists | 95 percent of Medicare Physician fee schedule. | On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007. | 25 to 75 percent (DMA questioned the self-reported % of >75, as did we) | In 2005, payments were increased to 100 percent of North Carolina Medicaid physician fee schedule; prior to that, rates were negotiated by procedure code. | CFR 447.325 — Customary charges in locality for comparable services. |
| Optical Service Suppliers | Dispensing fee paid on a fee schedule; supplies paid at negotiated contract rates based on industry charges. | No for dispensing fees; Yes, for supplies, with each renegotiation. | < 25 percent | | |
| Optometrists | 95 percent of Medicare Physician fee schedule | <p>Medicare fee schedule aggregate changes:</p> <ul style="list-style-type: none"> • 2004 — - 4.5 percent • 2005 — 1.5 percent • 2006 — - 4.4 percent <p>On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007.</p> | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |

State of North Carolina, Division of Medical Assistance
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Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|------------------------|--|--|--|------------------------------------|--|
| Oral Surgeons | Dental fee schedule. | See Dentists. | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |
| Orthodontists | Dental fee schedule. | See Dentists. | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |
| Pedodontists | Dental fee schedule. | See Dentists. | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |
| Periodontists | Dental fee schedule. | See Dentists. | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |
| Personal Care Services | Fee schedule based on costs. Personal care services — Domiciliary services are cost-settled if money is to be repaid to DMA. | No increases in 2006. Received increases in 2004 and 2005. | > 75 percent | | |

State of North Carolina, Division of Medical Assistance
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Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|---------------------|--|---|--|--|--|
| Pharmacists | Set by legislature. | No | < 25 percent | A change in dispensing fee payment to pharmacists must be determined by the Legislature. | |
| Physical Therapists | 95 percent of Medicare Physician fee schedule. | On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007. | < 25 percent | In 2005, payments were increased to 100 percent of North Carolina Medicaid physician fee schedule; prior to that, rates were negotiated by procedure code. | CFR 447.325 — Customary charges in locality for comparable services. |
| Physicians | 95 percent of Medicare Physician fee schedule. | <p>Medicare fee schedule aggregate changes:</p> <ul style="list-style-type: none"> • 2004 — - 4.5 percent • 2005 — 1.5 percent • 2006 — - 4.4 percent <p>On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007.</p> | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |

State of North Carolina, Division of Medical Assistance
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Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|----------------------|--|---|--|------------------------------------|--|
| Podiatrists | 95 percent of Medicare Physician fee schedule. | <p>Medicare fee schedule aggregate changes:</p> <ul style="list-style-type: none"> • 2004 — - 4.5 percent • 2005 — 1.5 percent • 2006 — - 4.4 percent <p>On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007.</p> | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |
| Portable X-Ray | 95 percent of Medicare Physician fee schedule. | <p>Medicare fee schedule aggregate changes:</p> <ul style="list-style-type: none"> • 2004 — - 4.5 percent • 2005 — 1.5 percent • 2006 — - 4.4 percent <p>On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007.</p> | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services |
| Private Duty Nursing | Fee schedule. | 5 percent reduction in FY 2003; no increase since then. | > 75 percent | | |

State of North Carolina, Division of Medical Assistance
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Table 7: Provider Payment Methodology Issues (Continued)

| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|--|--|---|--|--|--|
| Psychiatric Residential Treatment Facility (PRTF) | Cost-based rates. | Because of payment methodology, payment reflects cost increases. | 25 to 75 percent | | |
| Residential Mental Health Treatment | Fee schedule based on cost modeling. | Level III and IV rates rebased in March 2006 using cost information. | > 75 percent | DMA has reviewed rates and determined them to be adequate. | |
| Respiratory Therapists | 95 percent of Medicare Physician fee schedule. | <p>Medicare fee schedule aggregate changes:</p> <ul style="list-style-type: none"> • 2004 — - 4.5 percent • 2005 — 1.5 percent • 2006 — - 4.4 percent <p>On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007.</p> | < 25 percent | | CFR 447.325 — Customary charges in locality for comparable services. |

State of North Carolina, Division of Medical Assistance
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Table 7: Provider Payment Methodology Issues (Continued)

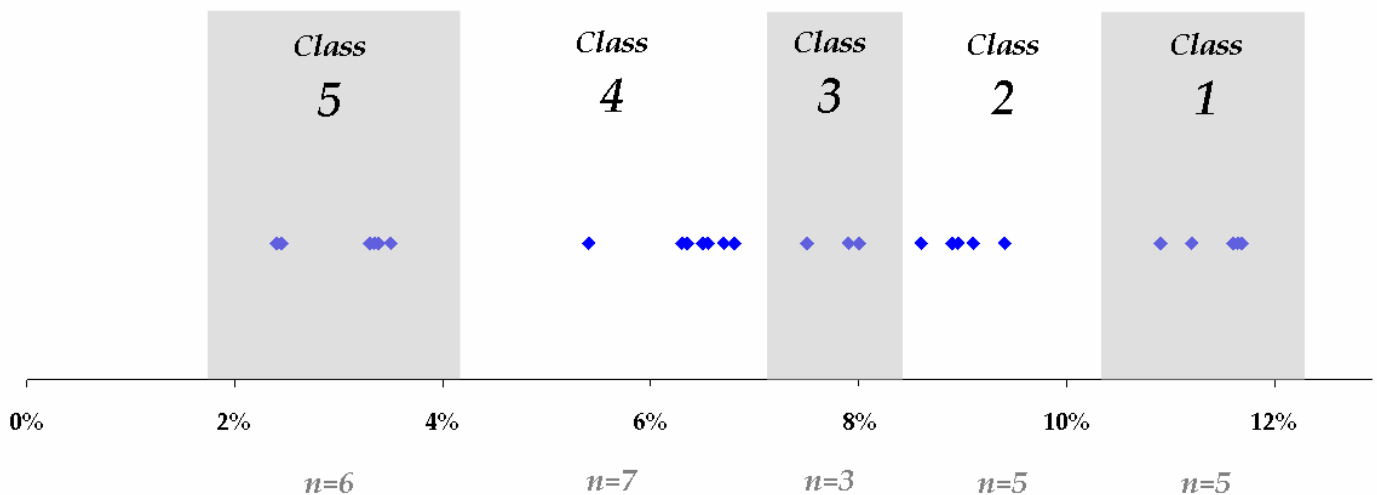
| Provider Categories | Current Payment Methodology | Recent Increases | "Typical" Provider's Medicaid Revenue as Percent of Total Revenue ⁸ | Other Reimbursement Considerations | Federal Regulations Limiting Reimbursement |
|---|--|---|--|---|--|
| Rural Health Clinics | Cost-settled or the Prospective Payment System (PPS); Physician fee schedule for services billed individually with CPTs/HCPCS codes. | Increase for FY 2004, FY 2005 and FY 2006. | > 75 percent | Effective December 31, 2005 these providers were required to choose either the PPS or cost settlement methodology. This was a one-time only selection. Some chose to remain on cost settlement. | CFR 447.371 — Cost or a single encounter rate based on cost of all services. |
| Speech/Language Pathologists/ Audiologists | 95 percent of Medicare Physician fee schedule. | <p>Medicare fee schedule aggregate changes:</p> <ul style="list-style-type: none"> • 2004 — - 4.5 percent • 2005 — 1.5 percent • 2006 — - 4.4 percent <p>On 12/9/2006, Congress rescinded the 5 percent decrease in the Medicare fee schedule that was scheduled for 1/1/2007.</p> | 25 to 75 percent | In 2005, payments were increased to 100 percent of North Carolina Medicaid physician fee schedule; prior to that, rates were negotiated by procedure code. | CFR 447.325 — Customary charges in locality for comparable services. |

Findings

We do not believe that a statistically sound methodology exists for comparing categories of providers to one another based on the data gathered for this study. Instead, we are relying on more subjective analyses to group categories of providers for prioritization of rate increases.

To determine priorities for allocation of the amount of funds appropriated for payment increases, we plotted the cost increases in a diagram, as shown below.

Diagram 1: Frequency of Total Cost Increases for All Provider Categories



This diagram presents a frequency distribution of rates of cost increase for all categories of providers. We plotted each rate of increase along a line and determined class intervals based on clusters of data points. The purpose of the diagram is to represent the frequency of rates of increase within each class interval.

The rate of cost increase data naturally falls into five class intervals. Class 5 comprises provider categories with rates of cost increase ranging from approximately two to four percent. Class 4 includes rates of increase of approximately five to seven percent, Class 3 from seven to eight percent, Class 2 from eight to nine percent and Class 1 from ten to twelve percent.

This diagram suggests dividing provider categories into five classes for consideration of priorities for allocating funds for payment increases. Table 8 identifies each of the five Classes, referred to as Cost Inflation Classes, and the categories of providers that fall within each.

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Table 8: Provider Categories Grouped by Cost Inflation Class

| Cost Inflation Class | Provider Category | Two-Year Cost Inflation | Cost Increases Reflected in Payment | If Cost Increases Are Not Reflected in Payment, Have There Been Recent Rate Increases? | Recommended Priority for Payment Increase |
|----------------------|---|-------------------------|--------------------------------------|--|---|
| 1 | Health Department Clinical Services | 11.6% | Yes | | None |
| 1 | Rural Health Clinics | 11.6% | Yes, for some providers | Yes | None |
| 1 | Federally Qualified Health Centers (FQHCs) | 11.6% | Yes, for some providers | Yes | None |
| 1 | Pharmacists | 11.2% | No | No | None, would require legislation change |
| 1 | Psychiatric Residential Treatment Facilities (PRTFs) | 10.9% | Yes | | None |
| 2 | Residential Mental Health Treatment (Therapy Services Only) | 9.4% | No | Yes, some rates rebased in 2006 | None |
| 2 | Dialysis Centers | 9.1% | No | No | High |
| 2 | Hospitals — Inpatient | 8.9% | Yes, in form of supplemental payment | Yes, 3.4% in FFY 2005 | None |
| 2 | Hospitals — Outpatient | | Yes | | None |
| 2 | Intermediate Care Facilities for the Mentally Retarded (ICF/MR) | 8.6% | Yes, for direct costs | Yes, 1% on indirect cost rate in 2004 and from provider tax-related payments | Low |

State of North Carolina, Division of Medical Assistance
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Table 8: Provider Categories Grouped by Cost Inflation Class (Continued)

| Cost Inflation Class | Provider Category | Two-Year Cost Inflation | Cost Increases Reflected in Payment | If Cost Increases Are Not Reflected in Payment, Have There Been Recent Rate Increases? | Recommended Priority for Payment Increase |
|----------------------|--|-------------------------|---|--|---|
| 3 | Nursing Facilities | 8.0% | No; however, legislature has appropriated dollars to fund rebasing of rates | Yes, for some facilities from provider tax-related payments | Low |
| 3 | Dentists | 7.9% | No | Yes, for selected procedures | High |
| 3 | Physicians and Other Professionals | 7.5% | No | No | High |
| 4 | Ambulatory Surgery Centers and Birthing Centers | 6.8% | No | No | High |
| 4 | Ambulance | 6.7% | No | Yes | Medium |
| 4 | Community-based Providers — Independent Professional Practitioners (IPP) Expansion | 6.5% | No | No | Medium |
| 4 | Community-based Providers — HMO /Capitated | 6.5% | Yes, actuarially adjusted as necessary | | None |
| 4 | Independent Laboratories | 6.3% | No | No | Medium |
| 4 | Optical Service Suppliers | 6.3% | No for dispensing fees; Yes, for supplies | No, for dispensing fees | Low |
| 4 | Community Alternatives Program (CAP) | 5.4% | No | No | Low |

State of North Carolina, Division of Medical Assistance
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Table 8: Provider Categories Grouped by Cost Inflation Class (Continued)

| Cost Inflation Class | Provider Category | Two-Year Cost Inflation | Cost Increases Reflected in Payment | If Cost Increases Are Not Reflected in Payment, Have There Been Recent Rate Increases? | Recommended Priority for Payment Increase |
|----------------------|--|-------------------------|-------------------------------------|--|---|
| 5 | Home Health Agencies, Home Infusion Therapy and Personal Care Services | 3.5% | No | Yes, for Personal Care Service | Low, because of separate appropriation for payment increase |
| 5 | Hospice Agencies | 3.3% | No | 3.5% Compound Average Annual Growth Rate for 2004 and 2005 | None |
| 5 | Adult Care Home Personal Care Services | 3.3% | No | No | High |
| 5 | Private Duty Nursing | 3.3% | No | No | High |
| 5 | Hearing Aid Suppliers | 2.4% | Yes | | None |
| 5 | Durable Medical Equipment, including Orthotic and Prosthetic Devices | 2.4% | No | No | Medium |

After we assigned categories of providers to the cost inflation classes, we combined the quantitative and qualitative data described above and assigned providers to either a “High,” “Medium” or “Low” priority designation within their class. We also identified several provider categories where we determined no rate increase was warranted. We recognize that the assignment of priorities is a subjective process, but we followed a number of assignment rules:

1. If a provider category is paid partially on a cost-based or rate methodology where it receives some type of increase in payment, and it has received small rate increases in recent years; or has a lower rate of cost increase within its class than other provider categories who have also received no rate increases in recent years, we determined it to be low priority provider category.

2. We determined that several categories of providers should not be on the priority list for payment increases, for example:
 - a. Health Department Clinical Services because they are paid through cost settlement.
 - b. Federally Qualified Health Centers and Rural Health Clinics because some of them are paid a prospective rate that has been increased each year and the others are paid on a cost basis that is reflective of their cost increases.
 - c. Psychiatric Residential Treatment Facilities because they are paid on a facility-specific cost basis up to a limit, but they can request increases in their limit and have done so successfully in many cases in recent years.
 - d. Inpatient and Outpatient Hospitals, because they receive payment increases each year in the form of supplemental payments.
 - e. Residential Mental Health Treatment therapy services, because DMA has reviewed the rates and determined that they are adequate.
3. If a provider category has a higher rate of cost increase within its class than other provider categories and has received no rate increases in recent years, we determined it to be a high priority provider category.
4. If a provider category has a somewhat higher rate of cost increase within its class than other providers and has received no rate increases in recent years; or has a higher rate of cost increase within its class and has received some rate increases in recent years, we determined it to be a medium priority provider category.

Study Limitations

We believe that the inflation index data and the cost indexes we developed provide a fair estimate of cost increases across North Carolina Medicaid providers. However, we recognize that with additional time, these estimates could be more precise. For example:

- The measure of the rate of increases for all other costs is determined from national data. To the extent that the relative cost increases among providers categories in North Carolina is different than among provider categories nationally, some providers' cost increases may be over or understated relative to others'.
- As discussed above, we used "Consultants' best judgment" in some cases to determine the weight to be assigned to cost components for estimating the rate of inflation, e.g., weights for professional liability insurance costs and wages and benefits for pharmacists and community-based providers. Although Clifton

Gunderson consulted with provider industry representative to discuss and validate their assumptions, in some cases, additional time would have permitted more in-depth analysis on the part of both the consultants and the provider industry.

- In some cases, inflation indexes were not specific to a particular provider category. Again, consultants' best judgment was used to determine which particular cost index would apply. For example, for DME and Orthotic and Prosthetic services, we found no direct wage data for this provider category, and determined that the average of the change in wages in Home Health Agency and Optometrists' Offices would be a reasonable proxy. More time to complete the study would not have alleviated this situation. In some cases, provider cost surveys could have supplemented this information. In our experience, however, such cost surveys require careful planning and execution to make sure the cost data collected is consistent across provider categories and is meaningful.

Summary

This report presents a summary of Medicaid provider cost increases by category of provider. We have presented a framework for considering provider categories for payment increases not only based on their rates of cost increases but on other important factors as well. We have recommended priorities for distribution of funds appropriated for payment increases to Medicaid provider categories.

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Appendix A: Inflation Analysis Source Data by Provider Category

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|--|---|--|--|--------|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Ambulance | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 62191 Ambulance Services" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Navigant Consulting judgment | — | — | Bureau of Labor Statistics, "Consumer Price Index, US City Average, Private Transportation (1996-2006)." Available Online: http://data.bls.gov/PDQ/outside.jsp?survey=ap |
| Adult Care Home Personal Care Services | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 6216 Home Health Care Services" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Home Health Input Price Index," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-hha.pdf | — | — | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|---|---|---|---|--|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Ambulatory Surgery Centers and Birthing Centers | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 62149 Freestanding Emergency Medical Centers" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Hospital Input Price Index, Compensation," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-pps-hospital-2002.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Hospital Input Price Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-pps-hospital-2002.pdf | Average of Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index" and Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Hospital Input Price Index." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-pps-hospital-2002.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|--------------------------------------|--|---|--|--------|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Community Alternatives Program (CAP) | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, Weighted Average of NAICS 623210 Residential mental Retardation Facilities" (2001 to 2005) and NAICS 6216 Home Health Care Services. Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Adjustments to Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index based on Clifton Gunderson's judgment | — | — | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|---------------------------|--|---|--|---|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Community-based Providers | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 624 Social Assistance" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Adjustments to Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index based on Clifton Gunderson's judgment | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Adjustments to Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index based on Clifton Gunderson's judgment | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|-------------------|---|---|--|--|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Dentists | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 6212 Offices of Dentists" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Physicians and Non-physician Compensation," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|-------------------|---|---|--|--|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Dialysis Centers | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 621492 Kidney and Dialysis Centers" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Physicians and Non-physician Compensation," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|--|--|----------------|--|--------|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Durable Medical Equipment, Including Orthotic and Prosthetic Devices | Bureau of Labor Statistics, Weighted average of "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, Weighted Average of NAICS 6216 Home Health Care Services (2001 to 2005) and NAICS 32132 Offices of Optometrists" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Industry input | — | — | Bureau of Labor Statistics, "Consumer Price Index, US City Average, Nonprescription Medical Equipment and Supplies," (1996-2006). Available Online: http://data.bls.gov/PDQ/outside.jsp?survey=ap |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|--|---|---|--|--|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Federally Qualified Health Centers (FQHCs) | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 6214 Outpatient Care Centers, Local Government" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Physicians and Non-physician Compensation," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|-------------------------------------|---|---|--|--|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Health Department Clinical Services | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 6214 Outpatient Care Centers, Local Government" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Physicians and Non-physician Compensation," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |
| Hearing Aid Suppliers | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 62132 Offices of Optometrists" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Clifton Gunderson's judgment | — | — | Bureau of Labor Statistics, "Consumer Price Index, US City Average, Nonprescription Medical Equipment and Supplies," (1996-2006). Available Online: http://data.bls.gov/PDQ/outside.jsp?survey=ap |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|-------------------|---|--|--|--------|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Hospice Agencies | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 6216 Home Health Care Services" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Home Health Input Price Index," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-hha.pdf | — | — | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|---|---|------------------------------|--|---|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Intermediate Care Facilities for the Mentally Retarded (ICF/MR) | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 623210 Residential Mental Retardation Facilities" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | DMA Cost Reports | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Hospital Input Price Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-pps-hospital-2002.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |
| Optical Service Suppliers | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 44613 Optical Goods Stores" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Clifton Gunderson's judgment | — | — | Bureau of Labor Statistics, "Consumer Price Index, US City Average, Eyeglasses and Eye Care," (1996-2006). Available Online: http://data.bls.gov/PDQ/outside.jsp?survey=ap |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|-------------------|---|--------------------------------|--|------------------------------|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Pharmacists | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 44611 Pharmacies and Drug Stores" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Navigant Consulting's judgment | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Clifton Gunderson's judgment | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|--|---|---|--|--|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Physicians and All Other Professionals | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 6211 Offices of Physicians" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Physicians and Non-physician Compensation," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|----------------------|---|--|--|--------|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Private Duty Nursing | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 6216 Home Health Care Services" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Home Health Input Price Index," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-hha.pdf | — | — | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|---|---|---|---|---|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Psychiatric Residential Treatment Facilities (PRTF) | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 62221 Psychiatric and Substance Abuse Hospital" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Hospital Input Price Index, Compensation," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-pps-hospital-2002.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Hospital Input Price Index, Professional Liability Insurance," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-pps-hospital-2002.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Prospective Payment System (IPPS) Hospital Input Price Index, Professional Liability Insurance," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-pps-hospital-2002.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|---|--|---|--|--|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Residential Mental Health Treatment (Therapy Services Only) | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 6232 Residential Mental Health Facilities" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Adjustments to Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index based on Clifton Gunderson's judgment | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

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Appendix A: Inflation Analysis Source Data by Provider Category (Continued)

| Provider Category | Wages and Benefits | | Medical/Professional Liability Insurance | | All Other Costs |
|----------------------|---|---|--|--|---|
| | Two Year Change | Weight | Two Year Change | Weight | Two Year Change |
| Rural Health Clinics | Bureau of Labor Statistics, "Quarterly Census of Employment and Wages, North Carolina - Statewide, Average Weekly Wage, NAICS 6214 Outpatient Care Centers, Local Government" (2001 to 2005). Available online: http://data.bls.gov/PDQ/outside.jsp?survey=en | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Physicians and Non-physician Compensation," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance." (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Centers for Medicare and Medicaid Services, "Quarterly Index Levels in the CMS Medicare Economic Index, Professional Liability Insurance," (Downloaded December 2006). Available online: http://www.cms.hhs.gov/MedicareProgramRatesStats/downloads/mktbskt-economic-index.pdf | Bureau of Labor Statistics, "Consumer Price Index, US City Average, All Items Less Food," (Downloaded December 2006). Available online: http://www.bls.gov/cpi/cpid03av.pdf and http://www.bls.gov/cpi/cpid05av.pdf |

State of North Carolina, Division of Medical Assistance
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Appendix B: Provider Category Representatives

| Provider Category | Representative | Association |
|---|--|--|
| Adult Care Homes | Jerry Cooper, Ms. Lou Wilson | North Carolina Assisted Living Association |
| Ambulatory Surgery Centers | Hope Mangum | James E Davis Ambulatory Surgical Center |
| Ambulance | Kim Stanley | NC Association of EMS Administrator |
| Birthing Centers | None | None |
| Chiropractors | Tom Schoenvogel | NC Chiropractic Association |
| Community Alternatives Program (CAP) | Robert Hedrick - Director, Mary Freeman - President | NC Association of Community Bases ICF-MR and CAP Service Providers |
| Community-based Providers | Jim Edgerton, Sherry Thomas | Association for Home and Hospice Care (AHHC) |
| Certified Registered Nurse Anesthetists (CRNAs) | Deborah Steenson | NC Association of Nurse Anesthetists |
| Dentists | Fay Marley | NC Dental Society |
| Dialysis Centers | Jenna Krisher | Southeastern Kidney Council |
| Durable Medical Equipment | Kim Brummett | NCAMES |
| Federally Qualified Health Centers (FQHCs) | Sonya Bruton | NC Community Health Center Association |
| Health Department Clinical Services | Deborah Rowe | NC Association of Public Health |
| Hearing Aid Suppliers | Sherwood M Dixon | NC Association of Hearing Care Professionals |
| Home Health Agencies | Jim Edgerton, Sherry Thomas | None |
| Home Infusion Therapy | Jim Edgerton, Sherry Thomas | None |
| Hospice Agencies | Judy Bruger, Susan Balfour | The Carolinas Center for Hospice and End of Life Care |
| Hospital | Millie Harding, Hugh Tilson | NC Hospital Association NCHA |

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Appendix B: Provider Category Representatives (Continued)

| Provider Category | Representative | Association |
|---|-----------------------------|--|
| Intermediate Care Facilities for the Mentally Retarded (ICF/MR) | Mary Freeman | NC Association of Community Bases ICF/MR and CAP Service Providers |
| Independent Laboratories | None | None |
| Mental Health | Peyton Maynard | NC Providers Council |
| Nurse Midwives / Nurse Practitioners | Gail Pruett | NC Nurses Association. |
| Nursing Facilities | Craig Souza | North Carolina Health Care Facilities Association |
| Occupational Therapists | None | NC Occupation Therapy Association |
| Optical Service Suppliers | None | None |
| Ophthalmologists | Barbara Fussell | NC Opticians Association |
| Optometrists | Sue Gardner | NC Optometric Association |
| Oral Surgeons | Vanessa Patoja | NC State Society of Maxillofacial Surgery |
| Orthodontists | Madeline J. Serrano | NC Association of Orthodontists |
| Orthotic and Prosthetic Devices | Eddie White | NCO&P Trade Association |
| Pedodontists | Dianne Dilley | NC Academy of Pediatric Dentistry |
| Periodontist | Dr. Gregory C. Gell | Tarheel Endodontists Association |
| Personal Care Services | Jim Edgerton, Sherry Thomas | Association for Home and Hospice Care (AHHHC) |
| Pharmacists | Fred Eckel | NC Association of Pharmacists |
| Physical Therapists | None | NC Physical Therapy Association |
| Physicians | Sue Makey | NC Academy of Family Physicians, Inc |
| Podiatrists | Jean Kirk | NC Foot and Ankle Society |

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Appendix B: Provider Category Representatives (Continued)

| Provider Category | Representative | Association |
|--|-----------------------------|---|
| Portable X-Ray | John Nobitt | NC Biomedical Association |
| Private Duty Nursing | Jim Edgerton, Sherry Thomas | None |
| Psychiatric Facilities | James Smith | Southern State Psychiatric Hospital Association |
| Residential Psych | Robert Hedrick - Director | NC Providers Council |
| Respiratory Therapists | Susan Collins | NC Society of for Respiratory Care |
| Rural Health Clinics | Gigi Crane | Office of Rural Health |
| Speech/Language Pathologists /Audiologists | None | NC Speech, Hearing & Language Association |